BRUHAT BANGALORE MAHANAGARA PALIKE									
YELAHANKA ZONE									
Name of work:"Consultancy services for preparation of DPR for the work of Construction of RCC Drain and Culverts at Brundavan layout, Hariraja layout, Hanumappa layout and surrounding areas in ward no -03 Yelahanka Satellite Town sub Division. "Est cost Rs. 175 Lakhs"									
		Estimate Cost Rs.							**17500000**
Sl N	**Description of item**	**Unit**	**No**	**L**	**B**	**D**	**Qty**	**Rate**	**Amount**
1	KSRRB 300-1. **Earth work excavation** by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. P No. 143/ Item No. 19.1/ PWD SR 2018-19								
		Cum							
	RCC Drain								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	1.1	0.9	341.02		
	Brundavan Layout 2nd main road		2	150	1.1	0.9	297.15		
	Brundavan layout Cross road		2	25	1.1	0.9	49.50		
	BHEL Layout								
	BHEL 1st Main road		2	105	1.1	0.9	207.90		
	BHEL 11th cross road		2	60	1.1	0.9	118.80		
	BHEL 10th cross road		2	165	1.1	0.9	326.70		
	BHEL 9th cross road		2	67	1.1	0.9	132.66		
	BHEL 8th cross road		2	30	1.1	0.9	59.40		
	Hariraja Layout		2	90	1.1	0.9	178.20		
	For Kerb								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0.2	0.2	13.78		
	Brundavan Layout 2nd main road		2	150	0.2	0.2	12.01		
	Brundavan layout Cross road		2	25	0.2	0.2	2.00		
	BHEL Layout								
	BHEL 1st Main road		2	105	0.2	0.2	8.40		
	BHEL 11th cross road		2	60	0.2	0.2	4.80		
	BHEL 10th cross road		2	165	0.2	0.2	13.20		
	BHEL 9th cross road		2	67	0.2	0.2	5.36		
	BHEL 8th cross road		2	30	0.2	0.2	2.40		
	Hariraja Layout		2	90	0.2	0.2	7.20		
	Culvert		2	6	1.2	1	14.40		
	Culvert		6	7.5	1.2	1	54.00		
						Cum	**1848.88**	**211.79**	**391573**
	Basic Rate	**179.00**							
	lead and lift	**21**							
	Area Weightage @ 6%	**11.99**							
	Total	**211.79**							
2	KSRRBM29001.Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed,placed infoundation and compacted by vibration including curing including cost of materials,labour, HOM complete as per the specification Specification No. P No. 254/ Item No. 34.2/ PWD SR 2018-19								
		cum							
	RCC Drain								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	1.1	0.15	56.76		
	Brundavan Layout 2nd main road		2	150	1.1	0.15	48.76		
	Brundavan layout Cross road		2	25	1.1	0.15	8.25		
	BHEL Layout								
	BHEL 1st Main road		2	105	1.1	0.15	34.65		
	BHEL 11th cross road		2	60	1.1	0.15	19.80		
	BHEL 10th cross road		2	165	1.1	0.15	54.45		
	BHEL 9th cross road		2	67	1.1	0.15	22.11		
	BHEL 8th cross road		2	30	1.1	0.15	9.90		
	Hariraja Layout		2	90	1.1	0.15	29.70		
	For Kerb								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0.2	0.1	6.88		
	Brundavan Layout 2nd main road		2	150	0.2	0.1	5.91		
	Brundavan layout Cross road		2	25	0.2	0.1	1.00		

Sl N	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	BHEL Layout								
	BHEL 1st Main road		2	105	0.2	0.1	4.20		
	BHEL 11th cross road		2	60	0.2	0.1	2.40		
	BHEL 10th cross road		2	165	0.2	0.1	6.60		
	BHEL 9th cross road		2	67	0.2	0.1	2.68		
	BHEL 8th cross road		2	30	0.2	0.1	1.20		
	Hariraja Layout		2	90	0.2	0.1	3.60		
	Culvert		2	6.0	1.2	0.15	2.16		
	Culvert		6	7.5	1.2	0.15	8.10		
						cum	**329.11**	**4479.56**	**1474250**
	Basic Rate	**4226**							
	Area Weightage @ 6%	**253.56**							
	Total	**4479.56**							
3	[illegible] 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specifications.. Item No. 37.59.2/ page no:271/PWD SR								
	RCC Drain Raft	Cum							
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0.9	0.15	46.44		
	Brundavan Layout 2nd main road		2	150	0.9	0.15	40.50		
	Brundavan layout Cross road		2	25	0.9	0.15	6.75		
	BHEL Layout								
	BHEL 1st Main road		2	105	0.9	0.15	28.35		
	BHEL 11th cross road		2	60	0.9	0.15	16.20		
	BHEL 10th cross road		2	165	0.9	0.15	44.55		
	BHEL 9th cross road		2	67	0.9	0.15	18.09		
	BHEL 8th cross road		2	30	0.9	0.15	8.10		
	Hariraja Layout		2	90	0.9	0.15	24.30		
	RCC Drain wall								
	Brundavan Layout								
	Brundavan Layout 1st main road		4	172	0.15	0.6	61.92		
	Brundavan Layout 2nd main road		4	150	0.15	0.6	54.00		
	Brundavan layout Cross road		4	25	0.15	0.5	7.50		
	BHEL Layout								
	BHEL 1st Main road		4	105	0.15	0.6	38.45		
	BHEL 11th cross road		4	60	0.15	0.6	21.60		
	BHEL 10th cross road		4	165	0.15	0.6	59.40		
	BHEL 9th cross road		4	67	0.15	0.6	22.79		
	BHEL 8th cross road		4	30	0.15	0.6	10.08		
	Hariraja Layout		4	90	0.15	0.6	32.40		
	Culvert								
	Raft		2	6.0	1.2	0.25	3.60		
	wall		2x2	6.0	0.2	0.45	2.16		
	Culvert								
	Raft		6	7.5	1.2	0.25	13.50		
	wall		6x2	7.5	0.2	0.45	8.10		
						Cum	**568.78**	**7070.2**	**4021372**
	Basic Rate	**6670**							
	Area Weightage @ 6%	**400.2**			**For Steel**		**27.36**	**Culvert**	
	Total	**7070.2**			**calculation**		**541.42**	**Drain**	
4	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specificatio (I No-28.8.2,P No-229)								
		Tonne							
	All Culverts and Drains included								
	80kg/Cum for Culvert		80	27.36			2161.65		
	60kg/Cum For Drain		60	541.417644			32485.06		
						Tonne	**34.65**	**72326.98**	**2505891**

Sl N	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	**68233**							
	Area Weightage @ 6%	**4093.98**							
	Total	**72327**							
5	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
		Sqm							
	RCC Drain								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172	0.9		309.60		
	Brundavan Layout 2nd main road		2	150	0.9		270.00		
	Brundavan layout Cross road		2	25	0.75		37.50		
	BHEL Layout								
	BHEL 1st Main road		2	107	0.75		161.22		
	BHEL 11th cross road		2	60	0.75		90.00		
	BHEL 10th cross road		2	165	0.75		247.50		
	BHEL 9th cross road		2	67	0.9		120.60		
	BHEL 8th cross road		2	30	0.75		45.00		
	Hariraja Layout		2	90	0.75		135.00		
						Sqm	**1416.42**	**2337**	**3310174**
	Data Rate	**2337**							
6	Providing and Fixing **pre cast covering Slab 250mm** thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	BHEL Layout /Brundavan Layout	Sqm							
	Culvert		2	6.0	1.2		14.4		
	Culvert		6	7.5	1.2		53.52		
						Sqm	**67.92**	**5418**	**367991**
	Data Rate	**5418**							
7	5.29(b) Providing and fixing **pre cast solid cement concrete kerb stones** made out of C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 27/ Item No. 5.30/ PWD SR 2018-19								
		Nos							
	RCC Drain								
	Brundavan Layout								
	Brundavan Layout 1st main road		2	172			344.00		
	Brundavan Layout 2nd main road		2	150			300.00		
	Brundavan layout Cross road		2	25			50.00		
	BHEL Layout								
	BHEL 1st Main road		2	107			214.96		
	BHEL 11th cross road		2	60			120.00		
	BHEL 10th cross road		2	165			330.00		
	BHEL 9th cross road		2	67			134.00		
	BHEL 8th cross road		2	30			60.00		
	Hariraja Layout		2	90			180.00		
	Deduction of Kerbs due to Trees, Poles and Shoulders						-59		
							1674.20		
				l,e 1795/0.45			3720.44		
						Nos	**3720**	**477**	**1774440.00**
	Basic Rate	**450**							
	Area Weightage @ 6%	**27**							
	Total	**477**							
8	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
		Sqm							
	RCC Drain								
	Brundavan Layout								

Sl N	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Brundavan Layout 1st main road		2	172		0.3	103.20		
	Brundavan Layout 2nd main road		2	150		0.3	90.00		
	Brundavan layout Cross road		2	25		0.3	15.00		
	BHEL Layout								
	BHEL 1st Main road		2	107		0.3	64.49		
	BHEL 11th cross road		2	60		0.3	36.00		
	BHEL 10th cross road		2	165		0.3	99.00		
	BHEL 9th cross road		2	67		0.3	40.20		
	BHEL 8th cross road		2	30		0.3	18.00		
	Hariraja Layout		2	90		0.3	54.00		
	Deduction of Kerbs due to Trees, Poles and Shoulders		2	27		0.3	-15.99		
						Sqm	**503.90**	**84.8**	**42731**
	Basic Rate	**80**							
	Area Weightage @ 6%	**4.8**							
	Total	**84.8**							
9	KSRRB M300-13. Excavation for roadway in hard rock (requiring blasting) by drilling, blasting and breaking, trimming of bottom and side slopes in accordance with requirements of lines, grades and cross sections, loading and stacking at site of cut road with a lead of 1.00 km and complete as per specifications. (Excavated rock credited to contractor)								
	New Roads	Cum							
	BHEL 9th cross road		1	71	5	0.45	159.75		
	BHEL 8th cross road		1	31	5	0.45	69.75		
						Cum	**229.50**	**43.46**	**9974**
	Basic Rate	**41**							
	Area Weightage @ 6%	**2.46**							
	Total	**43.46**							
10	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
		Cum							
	New Roads								
	BHEL 9th cross road		1	71	5	0.15	53.25		
	BHEL 8th cross road		1	31	5	0.15	23.25		
						Cum	**76.50**	**1855**	**141908**
	Basic Rate	**1750**							
	Area Weightage @ 6%	**105**							
	Total	**1855**							
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
		Cum							
	New Roads								
	BHEL 9th cross road		1	71	5	0.23	81.65		
	BHEL 8th cross road		1	31	5	0.23	35.65		
						Cum	**117.30**	**2001.28**	**234750**
	Basic Rate	**1888**							
	Area Weightage @ 6%	**113.28**							
	Total	**2001.28**							
12	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
		Sqm							
	Roads								
	BHEL 9th cross road		1	71	5		355.00		
	BHEL 8th cross road		1	31	5		155.00		
						Sqm	**510.00**	**33.92**	**17299**
	Basic Rate	**32**							
	Area Weightage @ 6%	**1.92**							
	Total	**33.92**							

Sl N	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
13	KSRRB 500-11. Providing and laying **bituminous macadam** on Prepared Surface with crushed Coarse aggregates as per Design mix formulae for base/binding course including loading of aggregates with F.E loader,Hot mixing of Stone aggregates and bitumen in Hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve desired density, but excluding cost of primer/Tack coat including lead, lift and cost of all materials, labour HOM of machinaries complete as per Specifications. MORTH Ch 5. using 40/60 TPH capacity HMP with Mechanical paver Gr-II (50mm - 75mm) with 3.4% VG-30 bitumen.(P.No-159,I No-21.11.6)								
		Cum							
	Roads								
	BHEL 9th cross road		1	71	5	0.05	17.75		
	BHEL 8th cross road		1	31	5	0.05	7.75		
						Cum	**25.50**	**7428.48**	**189426**
	Basic Rate	**7008**							
	Area Weightage @ 6%	**420.48**							
	Total	**7428.48**							
14	KSRRB M500-2: **Cleaning the excisting** black topped surface with brooms, soft brushs and finally dusting with old gunny bags and compressed air to receive bituuminous tratement including cost of all materials, labours, HOM complete as per specifications. P No. 158/ Item No. 21.2/ PWD SR 2018-19								
			Sqm						
	Roads								
	BHEL 9th cross road		1	71	5		355.00		
	BHEL 8th cross road		1	31	5		155.00		
						Sqm	**510.00**	**5.3**	**2703**
	Basic Rate	**5**							
	Area Weightage @ 6%	**0.3**							
	Total	**5.3**							
15	KSRRB M500-10. Tack Coat:- Providing and applying **tack coat** using 80/100 grade bitumen (VG 10) in boiler fitted with spray set distributor at the rate of 0.20 kg per sqm on the existing prepared bituminous surface cleaned with mechancial broom. complete as per specifications. MORTH Specification No. 503 (P-159, Item.no 21.10).								
		Sqm							
	Roads								
	BHEL 9th cross road		1	71	5		355.00		
	BHEL 8th cross road		1	31	5		155.00		
						Sqm	**510.00**	**12.72**	**6487**
	Basic Rate	**12**							
	Area Weightage @ 6%	**0.72**							
	Total	**12.72**							
16	KSRRB M500-19. providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.6/ PWD SR 2018-19								
	Roads	Cum							
	BHEL 9th cross road		1	71	5	0.04	14.20		
	BHEL 8th cross road		1	31	5	0.04	6.20		
						Cum	**20.40**	**8831.92**	**180171**
	Basic Rate	**8332**							
	Area Weightage @ 6%	**499.92**							
	Total	**8831.92**							
17	KSRRB M800-13. Providing and laying of **hot applied thermoplastic** compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2015-16).								
		Sqm							
	Roads								
	BHEL 9th cross road		2	71	0.1		14.20		
	BHEL 8th cross road		2	31	0.1		6.20		
						Sqm	**20.40**	**454.74**	**9277**
	Basic Rate	**429**							
	Area Weightage @ 6%	**25.74**							
	Total	**454.74**							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
						Grand Total		14934284
For 12% Applicable GST								1792114
For 4% KRIDL Charges								597371.36
For 1% DPR and PMC Charges								175000
Miscellaneous Charges	L/S							1230.64
								17500000

Certificate:

1. The work spot has been inspected and the work is found necessary.
2. This estimate is prepared as per PWD SR of 2018-19
3. The provisions were made in this estimate are necessary and adequate.
4. This works come under B.B.M.P. limits.

Junior/Assistant Engineer

AE-3

Executive Engineer
Yelahanka Satellite Town sub Division

Assistant Executive Engineer
Yelahanka Satellite Town sub Division

Transhight Bangalore Consultants Pvt. Ltd.

Administrative Sanction for Rs. 175.00 Lakhs
One Crore Seventy five lakhs
is accorded under head P-3749
C.M. - Nava Nagarothana 110 Villages
grants (Annexure-07)
Registered as CE No. ... Subject
to conditions contained in
No. EE/YNK/59/2019-20 ... 07/11/2019

Executive Engineer

Technical Sanction
Accorded For Rs 175 Lakhs only
Head of A/C P3749
CER NO : 201 Dt 08.11.19

TA

CE (YNK)